

REMARKS

The Examiner's action dated March 30, 2004, has been received, and its contents carefully noted.

This application contains claims 1-51. Claims 2, 19 and 36 have been canceled without prejudice. Claims 1, 3, 4, 18, 20, 21, 35, 37 and 38 are hereby amended. No new matter has been added. Reconsideration is respectfully requested.

Applicant thanks Examiner LeRoux for the courtesy of an interview which was granted to Applicant's representative, Sanford T. Colb (Reg. No. 26,856). The interview was held in the USPTO on June 29, 2004. In the interview, Mr. Colb proposed to amend claim 1 in order to incorporate the limitations of claim 2. Mr. Colb pointed out and discussed the definition of DMAPI in the specification of the present patent application, and the distinction between this DMAPI and elements of the prior art that were cited by the Examiner in this context. The Examiner agreed to accept the definition of DMAPI provided by the specification and to reconsider the grounds of rejection on this basis.

Claims 1-5, 13, 16-22, 30, 33-39, 47, 48, 50 and 51 were rejected under 35 U.S.C. 102(e) over Murakami et al. (U.S. Patent 6,065,065). Applicant has amended independent claims 1, 18, and 35 in order to clarify the distinction of the present invention over the cited art. The amended independent

claims now include the limitations of dependent claims 2, 19 and 36, which have accordingly been canceled. Claims 3, 4, 20, 21, 37 and 38 have been amended for proper dependence from the independent claims in view of the cancellation of claims 2, 19 and 36. As the proposed amendment incorporates only limitations that were already present in the claims as filed, Applicant believes the amendment should be entered and examined even after the final rejection that was issued in this case.

Murakami describes a parallel computer system and file processing method using multiple I/O nodes. In Murakami's system, application programs may be executed by multiple calculation nodes (see, for example, Fig. 13 and col. 7, lines 20-24). Files may be divided into a plurality of partition files, for storage in a plurality of storage devices (for example, col. 3, lines 37-41). Only one calculation node - the master node, however, is able to access the storage devices (Fig. 10 and col. 6, lines 14-24). The other nodes are slave nodes, and receive file information from the storage devices only from the master process on the master node (Fig. 14 and col. 7, lines 62-67).

Claim 1 is drawn to a method for managing data storage, in which a session of a data management (DM) session is initiated on one node in a cluster using a parallel file

system (PFS), in accordance with a data management application programming interface (DMAPI) of the parallel file system. A user application, running on a second node, submits a request to the PFS on the second node to perform a file operation. The request is processed using the DMAPI, and in response, a DM event message is sent from the second node to the first node for processing by the DM application.

In rejecting claim 2 in the previous official action in this case, the Examiner identified the DMAPI that was recited in claim 2 (and is now recited in amended claim 1) with metafile 21, shown in Murakami's Fig. 17. Applicant pointed out that "metafile" and "API" are terms of art with clearly distinct meanings, and concluded that Murakami neither teaches nor suggests the use of an API, let alone a data management API as is now recited in claim 1.

In response to this argument, the Examiner maintained (on page 9 of the present official action) that Applicant has not pointed to a specific definition of DMAPI as included in the specification of the present patent application. Applicant respectfully points out that this assertion is incorrect. The term "DMAPI" is explicitly defined in the specification on page 16, lines 22-26. The definition makes reference to the XDSM standard, which is cited (and incorporated by reference) in the specification on page 2, lines 16-21, and which was

considered by the Examiner in the first official action in this case. The term "DMAPI" as used in the claims of the present patent application is clearly consonant with this explicit definition. Murakami's metafile 21, even if it may be accessed by a user application program, does not fall within the bounds of the definition.

Furthermore, even if this explicit definition were disregarded, the Examiner's interpretation of the term DMAPI appears to take in any and all data structures that are accessible to an application program, and thus goes beyond the bounds of reasonable interpretation. As noted in MPEP 2111.01:

"Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'. " [In *re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983), emphasis in original.]

MPEP goes on to state that "'Plain meaning' refers to the meaning given to the term by those of ordinary skill in the art." Applicant respectfully submits that any programmer of ordinary skill in the art would understand and be readily capable of distinguishing between the plain meanings of "API" and "metafile." A selection of definitions of these terms

that Applicant found in a "Google" search is presented below in Appendix A.

Thus, Applicant respectfully submits that claim 1, as amended, is patentable over Murakami. The prior art does not fairly teach or suggest initiating a session of a data management (DM) application on a first node in accordance with a DMAPI of a parallel file system; receiving a request submitted to the parallel file system by a user application running on a second node; processing the request using the DMAPI; and sending a DM event message from the second node to the first node for processing by the DM application. In contrast to the claimed method, in DMAPI implementations known in the art all events and sessions take place on a single node.

In view of the patentability of claim 1, claims 3-5, 13 and 16, which depend from claim 1, are believed to be patentable, as well.

Claims 18 and 35 respectively recite computing apparatus and a computer software product, which operate on principles similar to the method of claim 1, and have been amended in like manner. Therefore, for the reasons argued above, amended claims 18 and 35 are likewise believed to be patentable over Murakami. In view of the patentability of these independent

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claims, dependent claims 20-22, 30, 33, 34, 37-39, 47, 48, 50 and 51 are believed to be patentable, as well.

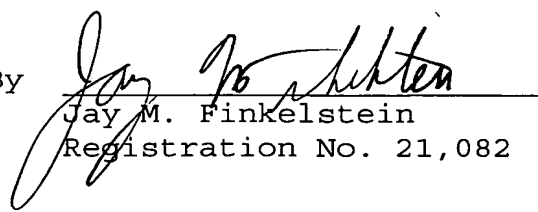
Claims 6-12, 14, 15, 23-29, 31, 32, 40-46 and 49 were rejected under 35 U.S.C. 103(a) over Murakami in view of Terry (US 2002/0026605), Goswami (US 2002/0056003) or Haneda (US 2003/0097517). As noted above, in view of the patentability of amended independent claims 1, 18 and 35, from which these claims depend, Applicant believes these dependent claims to be patentable, as well, over the cited art.

Applicant believes the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, Applicant respectfully submits that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested.

Respectfully submitted,

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